Jea-Young Leem

List of Publications by Year
in descending order

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110	773	687220	713332
papers	citations	13 h-index	21 g-index

112	112	112	910
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced Light Emission from Monolayer Semiconductors by Forming Heterostructures with ZnO Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 28809-28815.	4.0	47
2	Structural and blue emission properties of Al-doped ZnO nanorod array thin films grown by hydrothermal method. Electronic Materials Letters, 2012, 8, 445-450.	1.0	46
3	Crystallization of ZnO thin films via thermal dissipation annealing method for high-performance UV photodetector with ultrahigh response speed. Scientific Reports, 2021, 11, 382.	1.6	29
4	White light emission from nano-fibrous ZnO thin films/porous silicon nanocomposite. Journal of Sol-Gel Science and Technology, 2011, 59, 364-370.	1.1	27
5	Effects of cooling rate and post-heat treatment on properties of ZnO thin films deposited by solâ€“gel method. Applied Surface Science, 2011, 257, 9019-9023.	3.1	27
6	Evaluation of the junctionâ€™s electric field and the ideality factor of GaAs p-n junction solar cells by using photoreflectance spectroscopy. Journal of the Korean Physical Society, 2014, 64, 1031-1035.	0.3	21
7	Temperature-dependent Photoluminescence of Boron-doped ZnO Nanorods. Bulletin of the Korean Chemical Society, 2013, 34, 3335-3339.	1.0	20
8	Effects of buffer layer thickness on properties of ZnO thin films grown on porous silicon by plasma-assisted molecular beam epitaxy. Vacuum, 2012, 86, 1373-1379.	1.6	19
9	Effects of growth temperature for buffer layers on properties of ZnO thin films grown on porous silicon by plasma-assisted molecular beam epitaxy. Optical Materials, 2012, 34, 1543-1548.	1.7	17
10	Effects of post-heated ZnO seed layers on structural and optical properties of ZnO nanostructures grown by hydrothermal method. Electronic Materials Letters, 2013, 9, 293-298.	1.0	17
11	Structural and electrical properties of catalyst-free Si-doped InAs nanowires formed on Si(111). Scientific Reports, 2015, 5, 16652.	1.6	16
12	Growth and characterization of seed layer-free ZnO thin films deposited on porous silicon by hydrothermal method. Electronic Materials Letters, 2012, 8, 75-80.	1.0	15
13	Hydrothermally grown boron-doped ZnO nanorods for various applications: Structural, optical, and electrical properties. Electronic Materials Letters, 2014, 10, 81-87.	1.0	15
14	Laser-assisted sol-gel growth and characteristics of ZnO thin films. Applied Physics Letters, 2012, 100, 252108.	1.5	13
15	Hydrothermal growth and properties of rod-like ZnO submicron crystals on Al-doped ZnO seed layers with different Al concentrations. Journal of the Korean Physical Society, 2012, 60, 94-98.	0.3	13
16	Effects of annealing atmosphere and temperature on properties of ZnO thin films on porous silicon grown by plasma-assisted molecular beam epitaxy. Electronic Materials Letters, 2012, 8, 123-129.	1.0	13
17	Influence of annealing temperature on photoluminescence properties and optical constants of N-doped ZnO thin films grown on muscovite mica substrates. Physica B: Condensed Matter, 2015, 476, 71-76.	1.3	13
18	Structural, optical, and electrical properties of ZnO thin films deposited by sol-gel dip-coating process at low temperature. Electronic Materials Letters, 2014, 10, 869-878.	1.0	12

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19	Optical and electrical properties of InAs/GaAs quantum-dot solar cells. Journal of the Korean Physical Society, 2014, 64, 895-899.	0.3	12
20	Studies on temperature- and excitation-power-dependent photoluminescence of ZnO thin film grown by plasma-assisted molecular beam epitaxy. Current Applied Physics, 2013, 13, S168-S171.	1.1	11
21	Facile Synthesis and Enhanced Ultraviolet Emission of ZnO Nanorods Prepared by Vapor-Confined Face-to-Face Annealing. ACS Applied Materials & Interfaces, 2015, 7, 873-879.	4.0	11
22	Enhancement of the Ultraviolet Photoresponsivity of Al-doped ZnO Thin Films Prepared by using the Sol-gel Spin-coating Method. Journal of the Korean Physical Society, 2018, 72, 610-614.	0.3	11
23	Effects of precursor concentrations on ZnO nano-fibrous thin films grown by using the sol-gel dip-coating method. Journal of the Korean Physical Society, 2012, 61, 1925-1931.	0.3	10
24	Improved optical and electrical properties of solâ€“gel-derived boron-doped zinc oxide thin films. Journal of Sol-Gel Science and Technology, 2013, 67, 580-591.	1.1	10
25	A novel regrowth mechanism and enhanced optical properties of Mg_{0.25}Zn_{0.75}O nanorods subjected to vapor-confined face-to-face annealing. Journal of Materials Chemistry C, 2014, 2, 9918-9923.	2.7	10
26	Optical stability of shape-engineered InAs/InAlGaAs quantum dots. Journal of Applied Physics, 2009, 105, 053510.	1.1	9
27	Photoluminescence studies of ZnO thin films on porous silicon grown by plasma-assisted molecular beam epitaxy. Current Applied Physics, 2012, 12, S94-S98.	1.1	9
28	Growth and optical characteristics of Mg-doped GaAs epitaxial layers by molecular beam epitaxy. Microelectronic Engineering, 2012, 89, 6-9.	1.1	9
29	Effect of different sol concentrations on the properties of nanocrystalline ZnO thin films grown on FTO substrates by sol-gel spin-coating. Journal of the Korean Physical Society, 2014, 65, 480-486.	0.3	9
30	K-doping effects on the characteristics of ZnO thin films synthesized by using a spin-coating method. Journal of the Korean Physical Society, 2014, 64, 1581-1585.	0.3	9
31	Investigation of internal electric fields in GaAs solar cell under highly-concentrated light. Journal of the Korean Physical Society, 2015, 66, 667-671.	0.3	9
32	Size Control of ZnO Nanorods Using the Hydrothermal Method in Conjunction with Substrate Rotation. Journal of Nanoscience and Nanotechnology, 2017, 17, 7952-7956.	0.9	9
33	Crystallization of ZnO thin films without polymer substrate deformation via thermal dissipation annealing method for next generation wearable devices. RSC Advances, 2021, 11, 876-882.	1.7	9
34	Fabrication of coupled GaAs quantum dots and their optical properties. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 802-805.	0.8	8
35	Effects of in doping on structural and optical properties of ZnO nanorods grown by hydrothermal method. Electronic Materials Letters, 2013, 9, 509-512.	1.0	8
36	Evaluation of the photo-generated carrier density of GaAs solar cells by using electrical and optical biased electroreflectance spectroscopy. Journal of the Korean Physical Society, 2015, 67, 723-727.	0.3	7

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37	Effect of a Sn seed layer and ZnCl2 concentration on electrodeposited ZnO nanostructures. Journal of the Korean Physical Society, 2015, 66, 1253-1258.	0.3	7
38	Influence of Al-, Co-, Cu-, and In-doped ZnO buffer layers on the structural and the optical properties of ZnO thin films. Journal of the Korean Physical Society, 2015, 66, 224-228.	0.3	7
39	Effect of post-annealing temperature on structural and optical properties of ZnO thin films grown on mica substrates using sol-gel spin-coating. Journal of the Korean Physical Society, 2015, 67, 870-874.	0.3	7
40	Effects of Precursor Concentrations and Thermal Annealing on ZnO Nanorods Grown by Hydrothermal Method. Journal of Nanoscience and Nanotechnology, 2011, 11, 7479-7482.	0.9	6
41	Effects of growth conditions on the structural and the optical properties of ZnO submicron particles grown by using vapor phase transport. Journal of the Korean Physical Society, 2012, 60, 1599-1604.	0.3	6
42	Enhanced optical and electrical properties of boron-doped zinc-oxide thin films prepared by using the sol-gel dip-coating method. Journal of the Korean Physical Society, 2013, 63, 1804-1808.	0.3	6
43	Effects of Ga concentration on the structural, electrical and optical properties of Ga-doped ZnO thin films grown by sol-gel method. Journal of the Korean Physical Society, 2014, 64, 109-113.	0.3	6
44	Optical, Electrical, and UV Photoresponse Properties of Fluorine-Doped ZnO Thin Films Grown on Flexible Mica Substrates. Journal of Electronic Materials, 2015, 44, 4717-4721.	1.0	6
45	Transparent and flexible ZnO nanorods induced by thermal dissipation annealing without polymer substrate deformation for next-generation wearable devices. RSC Advances, 2021, 11, 17538-17546.	1.7	6
46	Carrier repopulation process for spatially-ordered InAs/InAlGaAs quantum dots. Journal of Applied Physics, 2011, 109, 113505.	1.1	5
47	Effects of post-heat-treatment temperature for seed layers on the properties of ZnO nanostructures grown by using the hydrothermal method. Journal of the Korean Physical Society, 2012, 60, 1593-1598.	0.3	5
48	Optimizing the optical properties of fluorine-doped ZnO thin films deposited by sol-gel spin-coating. Journal of the Korean Physical Society, 2014, 65, 509-514.	0.3	5
49	Seed-layer-free hydrothermal growth of zinc oxide nanorods on porous silicon. Electronic Materials Letters, 2014, 10, 565-571.	1.0	5
50	Synthesis and fast-response of a photodetector of hydrothermally grown ZnO nanorods through the use of a graphene oxide/ZnO seed layer. RSC Advances, 2015, 5, 94222-94226.	1.7	5
51	Facile synthesis and an effective doping method for ZnO:In 3+ nanorods with improved optical properties. Journal of Alloys and Compounds, 2015, 651, 1-7.	2.8	5
52	Effect of the pH of an Aqueous Solution on the Structural, Optical, and Photoresponse Properties of Hydrothermally Grown ZnO Nanorods and the Fabrication of a High Performance Ultraviolet Sensor. Journal of the Korean Physical Society, 2018, 72, 400-405.	0.3	5
53	Improving of the Rise and Decay Rates of an Ultraviolet Photodetector Using Stepwise Annealed ZnO Nanorods. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800929.	0.8	5
54	Morphology changes of In-doped ZnO nanosheets via ZnCl2 and InCl3 vapor formation during thermal dissipation annealing process and improved UV photoresponse properties. Journal of Alloys and Compounds, 2021, 877, 160241.	2.8	5

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55	Modified interfaces of ZnO thin films through MoS2 addition in precursor solution for MoS2/ZnO heterojunctions and their enhanced ultraviolet photodetection properties. Journal of Alloys and Compounds, 2022, 905, 164168.	2.8	5
56	Piezoelectric fields of localized states in trapezoidal InGaN quantum wells. Journal of Applied Physics, 2010, 108, 083110.	1.1	4
57	Optical parameters of Mg x Zn1â^'x O thin films prepared by using the sol-gel method. Journal of the Korean Physical Society, 2012, 60, 830-835.	0.3	4
58	Oxygen plasma power dependence on ZnO grown on porous silicon substrates by plasma-assisted molecular beam epitaxy. Materials Research Bulletin, 2012, 47, 2879-2883.	2.7	4
59	Counterpoise-assisted annealing effects on enhanced photoluminescence and electrical properties of solâ€"gel-derived ZnO thin films grown on polyimide substrates. Materials Chemistry and Physics, 2015, 167, 18-21.	2.0	4
60	Effect of Zn Nitrate Hexahydrate Concentration on ZnO Nanorods Grown from an Electrochemically Oxidized ZnO Seed Layer. Journal of the Korean Physical Society, 2018, 72, 1364-1368.	0.3	4
61	Morphology Effect of 1D ZnO Nanostructures Designed by Hydrothermal and Thermal Annealing for Fast Ultraviolet Photodetector Applications. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900946.	0.8	4
62	Optimal temperature of the solâ€"gel solution used to fabricate high-quality ZnO thin films via the dip-coating method for highly sensitive UV photodetectors. Journal of the Korean Physical Society, 2021, 78, 504-509.	0.3	4
63	Morphology modification of ZnO nanosheets and ZnO nanorods via thermal dissipation system for UV photoresponse improvement. Materials Science in Semiconductor Processing, 2022, 138, 106286.	1.9	4
64	Synthesis of interface modified MoS2/ZnO heterostructure via simple hydrothermal method and their enhanced UV photodetection characteristics with ultrafast photoresponse speed. Materials Research Bulletin, 2022, 150, 111767.	2.7	4
65	Optical Properties of ZnO Soccer-Ball Structures Grown by Vapor Phase Transport. Japanese Journal of Applied Physics, 2012, 51, 021102.	0.8	3
66	Temperature dependence of the optical properties of high-density GaAs quantum dots. Journal of the Korean Physical Society, 2012, 60, 1428-1432.	0.3	3
67	Fabrication and photoluminescence studies of porous ZnO nanorods. Journal of the Korean Physical Society, 2012, 61, 102-107.	0.3	3
68	Effects of growth temperature on the structural and the optical properties of ZnO thin films on porous silicon grown by using plasma-assisted molecular beam epitaxy. Journal of the Korean Physical Society, 2012, 60, 1570-1575.	0.3	3
69	Effects of zinc capping layers and annealing on the properties of porous silicon. Journal of the Korean Physical Society, 2012, 60, 1582-1586.	0.3	3
70	Photoluminescent properties of Cd x Zn1â^'x O thin films prepared by sol-gel spin-coating method. Electronic Materials Letters, 2013, 9, 497-500.	1.0	3
71	Growth and optical properties of sol-gel ZnO thin films grown on R-plane sapphire substrates. Journal of the Korean Physical Society, 2013, 62, 1154-1159.	0.3	3
72	Influence of dislocation density on carrier injection in InGaN/GaN light-emitting diodes operated with alternating current. Applied Physics Letters, 2013, 102, 011115.	1.5	3

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73	Temperature dependence of the photovoltage from Franz-Keldysh oscillations in a GaAs p+-i-n+ structure. Journal of the Korean Physical Society, 2015, 67, 916-920.	0.3	3
74	Improvement of the Crystallinity of <scp>MgZnO</scp> with a Zn Buffer Layer by Solâ€“Gel Spinâ€coating Method. Bulletin of the Korean Chemical Society, 2015, 36, 1575-1579.	1.0	3
75	Preparation of Highâ€Quality <scp>ZnO</scp> Nanorods by Electrodeposition Using a Rotating Cathode and Improvements in their <scp>UV</scp> Sensing Properties. Bulletin of the Korean Chemical Society, 2016, 37, 1278-1284.	1.0	3
76	Improved UV photoresponse properties of high-quality ZnO thin films through the use of a ZnO buffer layer on flexible polyimide substrates. Journal of the Korean Physical Society, 2016, 68, 705-709.	0.3	3
77	Electrical and optical characterizations of InAs/GaAs quantum dot solar cells. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	3
78	Effect of an Electrochemically Oxidized ZnO Seed Layer on ZnO Nanorods Grown by using Electrodeposition. Journal of the Korean Physical Society, 2018, 72, 1237-1242.	0.3	3
79	Effects of post-annealing temperature on the properties of ZnO nanorods grown on homogenous seed-layers by using the hydrothermal method. Journal of the Korean Physical Society, 2012, 60, 1605-1610.	0.3	2
80	Formation characteristics of a self-catalyzed GaAs nanowire without a Ga droplet on Si(111). Journal of the Korean Physical Society, 2012, 61, 2017-2021.	0.3	2
81	Structural dependency of the optical properties of coupled GaAs quantum qots and rings. Journal of the Korean Physical Society, 2012, 61, 455-459.	0.3	2
82	Modification in the structural and optical characteristics of InAs quantum dots by manipulating the strain distribution. Journal of the Korean Physical Society, 2012, 60, 460-465.	0.3	2
83	Effects of annealing temperature on optical properties of ZnO nanorods with Mg0.2Zn0.8O capping layers. Electronic Materials Letters, 2013, 9, 545-548.	1.0	2
84	Influences of dot-in-a-well structure and GaAs insertion layer on InP-based InAs quantum dots. Journal of the Korean Physical Society, 2013, 62, 1274-1279.	0.3	2
85	Influence of Cr-doping on the structural and the optical properties of ZnO thin films prepared by sol-gel spin coating. Journal of the Korean Physical Society, 2014, 64, 41-45.	0.3	2
86	A novel regrowth method to simply prepare Li-doped ZnO nanorods and improve their photoluminescence properties. RSC Advances, 2014, 4, 46635-46638.	1.7	2
87	Structural and Optical Properties of Nitrogenâ€doped Zinc Oxide Thin Films Grown on Muscovite Mica Substrates Using Solâ€“Gel Process. Bulletin of the Korean Chemical Society, 2015, 36, 2267-2271.	1.0	2
88	Effects of doping concentration on the structural and the optical properties of Sol-gel-derived In-doped ZnO thin films grown on muscovite mica substrates. Journal of the Korean Physical Society, 2015, 66, 1516-1520.	0.3	2
89	Oxidation-temperature dependence of the optical properties of ZnO thin films grown on corning glass by oxidation of metallic Zn. Journal of the Korean Physical Society, 2015, 67, 1278-1283.	0.3	2
90	Effects of Al-Doping Concentration on the Photoresponse Properties of Al-Doped ZnO Thin Films with ZnO Buffer Layer. Journal of Nanoscience and Nanotechnology, 2017, 17, 7879-7882.	0.9	2

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91	Fabrication of Fast-response Ultraviolet Light Sensors with LZO Thin Films using Sol-gel Spin-coating Method. Journal of the Korean Physical Society, 2018, 72, 417-423.	0.3	2
92	Thermal Dissipation Annealing for Crystallization of Inâ€Doped ZnO Films Deposited on Polyethylene Naphthalate Substrate without Substrate Deformation. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000698.	0.8	2
93	Catalyst-free ZnO on porous silicon grown by using vapor phase transport. Journal of the Korean Physical Society, 2012, 60, 1129-1134.	0.3	1
94	Photoluminescence studies of ZnO thin films prepared using a laser-assisted sol-gel method. Journal of the Korean Physical Society, 2012, 61, 1826-1830.	0.3	1
95	Optical properties and crystallinity of ZnO thin films grown on porous silicon by using plasma-assisted molecular beam epitaxy. Journal of the Korean Physical Society, 2012, 60, 1949-1952.	0.3	1
96	Structural properties and optical constants of Co-doped ZnO thin films deposited using sol-gel spin-coating. Journal of the Korean Physical Society, 2013, 63, 1962-1967.	0.3	1
97	Photoluminescence studies of ZnO films fabricated by using a combination of a hydrothermal method and plasma-assisted molecular beam epitaxy regrowth. Journal of the Korean Physical Society, 2014, 64, 455-460.	0.3	1
98	Influence of gas flow on structural and optical properties of ZnO submicron particles grown on Au nano thin films by vapor phase transport. Electronic Materials Letters, 2014, 10, 915-920.	1.0	1
99	Periodic variation in the electroluminescence intensity on a single pattern from InGaN/GaN light-emitting diodes fabricated on lens-shaped patterns. Journal of the Korean Physical Society, 2015, 66, 266-269.	0.3	1
100	Effect of Electric Current on Oxidation of Zn Films to ZnO Films Using Electrochemical System. Journal of Nanoscience and Nanotechnology, 2018, 18, 6095-6100.	0.9	1
101	Improved photoresponse properties of hydrothermally grown ZnO nanorods by controlling the Ga doping location. Journal of the Korean Physical Society, 2021, 78, 144-156.	0.3	1
102	The Role of AlN Interlayer in AlxGa1-xN/GaN Heterostructures with high x from 0.35 to 0.50 Grown on Sapphire (0001). Materials Research Society Symposia Proceedings, 2002, 722, 741.	0.1	0
103	Temperature-dependent photoluminescence of ZnO thin films deposited by using the sol-gel dip-coating method. Journal of the Korean Physical Society, 2012, 61, 1171-1176.	0.3	0
104	Improved blue electroluminescence in InGaN/GaN multiple-quantum well light-emitting diodes with an electron blocking layer. Journal of the Korean Physical Society, 2013, 62, 1160-1163.	0.3	0
105	Analysis of the abnormal voltage-current behaviors on localized carriers of InGaN/GaN multiple quantum well from electron blocking layer. Journal of the Korean Physical Society, 2013, 63, 1784-1788.	0.3	0
106	Photoluminescence and Structural Properties of Tinâ€doped <scp>ZnO</scp> Thin Films Deposited by Solâ€“Gel Dip Coating. Bulletin of the Korean Chemical Society, 2015, 36, 1613-1617.	1.0	0
107	A regrowth method for the fabrication of high-quality ZnO films and their application in fast-response UV sensors. Journal of the Korean Physical Society, 2017, 71, 47-53.	0.3	0
108	Effect of an Oxidized Metallic Zn Buffer Layer on the Morphological, Optical, Electrical, and Photoresponse Properties of Spin-coated ZnO Films. Journal of the Korean Physical Society, 2018, 72, 1243-1248.	0.3	0

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109	Effect of the Seed Layer Type and Precursor Concentration on the Structural, Morphological, and Photoresponse Properties of Hydrothermally Grown ZnO Nanorods. Journal of Nanoscience and Nanotechnology, 2020, 20, 298-303.	0.9	0
110	Regrowth of ZnO nanorods via VC-FTFA method and the effect of oxidation of ZnCl2 and InCl3 vapors on the photoresponse rate, photosensitivity, and stability. Materials Chemistry and Physics, 2022, 284, 126089.	2.0	0